Nos. 79-4, 79-5, and 79-491

In the

Supreme Court of the United States

OCTOBER TERM, 1979

JASPER F. WILLIAMS, M.D. AND EUGENE F. DIAMOND, M.D.,

Appellants,

and

JEFFREY C. MILLER, Acting Director, Illinois Department of Public Aid,

Appellant,

and

THE UNITED STATES,

Appellant,

v.

DAVID ZBARAZ, M.D., MARTIN MOTEW, M.D., on their own behalf and on behalf of all others similarly situated; CHICAGO WELFARE RIGHTS ORGANIZATION, an Illinois not-for-profit corporation, and JANE DOE, on her own behalf and on behalf of all others similarly situated,

Appellees.

On Appeal from the United States Court for the Northern District of Illinois, Eastern Division.

MOTION AND BRIEF AMICI CURIAE OF CERTAIN PHYSICIANS, PROFESSORS AND FELLOWS OF THE AMERICAN COLLEGE OF OBSTETRICS AND GYNECOLOGY IN SUPPORT OF THE APPELLANTS

DANIEL J. CHEELY 861-2792
FRANCIS D. MORRISSEY 861-2819
130 E. Randolph Drive
Chicago, Illinois 60601
Attorneys for 305
Obstetricians and Gynecologists

The Scheffer Press, Inc.—(312) 263-6850

TABLE OF AUTHORITIES

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ARGUMENT

Interest of the Amici

Three hundred five obstetricians and gynecologists respectfully file their brief as *amici curiae* in the instant case. The consent of all parties of record was duly requested for the filing of this *amicus* brief in support of the appellants. All parties have given their consent for the filing of this brief. Letters of consent have been filed with the Clerk of this Court.

These *amici,* all obstetricians and gynecologists, seek to bring before this Court information regarding the commonly accepted alternative medical treatment for the diseases and conditions that are discussed in the opinion of the district court and contained in the record before that court.

These *amici* submit that this information is substantively critical in this Court's consideration of the instant case because the opinion of the district court implies that, if abortion is not sanctioned by this Court, the morbidity and mortality among indigent women will be increased. These *amici* submit that contrary to accepted medical facts, the district court was erroneously led to believe that abortion is the medically indicated treatment for a wide variety of diseases and medical conditions and that alternative treatment is not available for these diseases and conditions. These *amici* submit that the overwhelming weight of medical literature refutes the basis of the opinion of the district court.

EXISTING MEDICAL ART AND TECHNOLOGY, INDEPENDENT OF ABORTION, IS EFFECTIVE IN THE CARE AND TREATMENT OF EACH OF THE CONDITIONS AND DISEASES RELIED UPON IN THE DECISION OF THE DISTRICT COURT AS NECESSARY INDICATIONS FOR ABORTION.

These *amici* submit that the opinion and affidavits in *Zbaraz* v. *Quern,* 469 F. Supp. 1212 (N.D. Ill. 1979), do not present a comprehensive, medically accepted analysis of the various means available for treating pregnant women who suffer from given diseases. Particularly, the opinion and affidavits create the inaccurate impression that abortion is the only effective means of treatment for many diseases and medical conditions. Medical literature, however, demonstrates that effective alternative treatments exist for the diseases or conditions referred to in the opinion of the district court and in plaintiffs' affidavits.

The use of these medically accepted treatments would prevent the increased morbidity and mortality among indigent pregnant woman that the district court found likely to be the result of the restriction of federal and state funding of abortion to life-endangering situations. In many instances the medically available treatments for said diseases and conditions are more beneficial to the continued health and well-being of the pregnant woman than abortion. Moreover, reimbursement is provided under Medicaid for these accepted treatments.

As physicians specializing in obstetrical practice, these *amici* further submit that the medical and scientific premises upon which the district court based its decision are both inadequate and misleading since they do not adequately reflect the customary and usual medical assessment of both individual risk and the present state of

medical act regarding alternative forms of treatment. These *Amici* have reviewed the relevant medical literature for the conditions mentioned in the opinion, as well as the affidavits submitted by the appellee. Moreover, these *amici* also have reviewed other conditions considered to be indicative of high risk pregnancy in arriving at their conclusions we present our findings to the Court:

Teenage Pregnancy. The quantity and quality of prenatal care have a direct and significant effect on the pregnant woman and her offspring. The most striking examples of the value of prenatal care occur in teenage pregnancies. The unique medical problems of the pregnant teenager can be controlled and the results of proper prenatal care prove to be no different from that in the general population.[1 2 3 4 5 6 7 8 9 10] These results show the benefits of proper pre-natal care for the pregnant teenager. There are no studies indicating any medical benefits of abortion for the pregnant teenager, nor is abortion recommended as the form of treatment. Many health problems prevalent among teenagers can be diagnosed and treated concurrently with pregnancy; such treatment may not occur should the patient choose abortion.

Sickle Cell Hemoglobinopathy. Sickle cell anemia, a genetic disease most prevalent among Blacks, presents another kind of pregnancy-related problem that is amenable to proper prenatal care and supervision. Clinical management of the pregnant woman with sickle cell hemoglobinopathy is based on (1) prevention of infection, (2) prevention of crises, and (3) maintenance of adequate hematocrit and hemoglobin levels.[11 12]

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[1] Footnotes set out in full as an Appendix (See pp. 1a thru 6a).

"The need for a concentrated effort to prevent infection in the Sickle Cell patient and to treat it aggressively once it occurs cannot be over-emphasized."[13] The results of a study at Chicago Lying-In Hospital showed *no* maternal deaths resulting from pregnancy in sickle cell patients.

Proposed treatment for sickle-cell anemia includes 1) Close observation and frequent visits to a physician; 2) Folic acid supplements; 3) Transfusions as necessary. (Exchange transfusions have been advocated and may be a viable adjunct to management. Partial exchange transfusions to prevent crises may also be of benefit.[14] 4) Anesthesia should be administered with great care to avoid hypoxia; 5) Early delivery should be considered; 6) Plain crises can be easily managed with heparin.[15 16]

Although the Depp Affidavit in the Appendix of Parties indicates otherwise, persons with the sickle cell trait (AS) are not predisposed to an increased complication rate. "This conclusion supports a long-standing clinical impression of the essentially benign nature of the AS condition."[17] Abortion is not medically indicated for the pregnant sickle cell patient.

Drug Addiction. The pregnant addict presents an example of the greater, beneficial effects, both short term and long term, of conventional treatment as opposed to abortion.

In ten studies of pregnancy in women either addicted to narcotics or being treated for narcotics addiction (*e.g.*, via methadone and/or withdrawal) no evidence indicates that pregnancy has an adverse effect upon the disease process, nor is there any indication of increased maternal mortality due to pregnancy complicated by addiction or treatment. Quite the contrary, these studies show a maternal mortality of virtually *zero* and indicate that

pregnancy may exert a beneficial effect on maternal health by encouraging women to enter and remain part of addiction treatment programs both pre- and post-partum[18-27] Although these studies revealed increased maternal complications, there is no significant evidence that these complications resulted from pregnancy as opposed to drug addiction. The maternal benefits in overall health far outweigh the risks of pregnancy complications. Abortion is not medically indicated for the pregnant drug addict.

Placenta Previa. Placenta previa is defined as "implantation of the placenta over or near the internal os of the cervix."[28] If the cervix were to dilate (or be dilated) too early, severe bleeding could occur. The placenta can be easily localized using ultrasound or other non-invasive techniques.

Placenta previa most often occurs as an ante-partum hemorrhage. The patient should be immediately admitted to the hospital and placed on strict bed rest. "Until recently, ante-partum hemorrhage came fourth in the list of causes of maternal death. Much of this is preventable with proper antenatal supervision and institutional care. The majority of deaths from placenta previa are due to misagement."[29] Delivery via cesarian section is advised. Abortion is not medically indicated for placenta previa.

Abruptio placenta is the premature separation of a normally implanted placenta from the uterus.[30] Bed rest is advisable, unless bleeding becomes severe, in which case vaginal or cesarian delivery should be attempted.[31 32 33] Proper delivery at this stage would be appropriate—not abortion.

Cardiovascular disease. "The mainstay of medical management for the pregnant cardiac patient is rest and

reassurance; rest in bed at home or prolonged hospitalization is necessary should clinical indications dictate."

"Pregnancy increases cardiac work, therefore one must attempt to limit other demands placed on the heart."[34 35]

The New York Heart Association has defined four functional classes of cardiovascular disease.[36]

Class 1. Asymptomatic
2. Symptomatic with heavy exercise
3. Symptomatic with light exercise
4. Symptomatic at rest

Restriction of activity decreases the burden on the heart while support and reassurance decrease the cardiac stress of fear and anxiety. Usually the physician is most concerned about abrupt changes in class 1 or 2 advancing to class 3 or 4, a common occurrence in patients with mitral stenosis.[37]

Measures indicated to decrease cardiac work include:

1.) Elastic support for the legs throughout pregnancy if the patient is ambulatory. 2. Prophylactic antibiotic therapy (Gentamicin/Ampicillin or similar broad spectrum combinations). 3. Prompt treatment of urinary tract infections (UTI) and respiratory infections. 4. *Moderate* sodium restriction. 5. Oral iron to avoid anemia (a decreased number of red blood cells requires increased cardiac work to circulate them.) 6. Frequent visits to cardiologist and obstetrician/gynecologist (this serves to decrease both stress and anxiety and the risks of undetected infection.)[38]

Most drugs used to improve heart function can be used during pregnancy. These include, primarily, drugs

such as digitalis. Diuretics, oral anticoagulants, and propanolol are *not* recommended during pregnancy, but they can be replaced with comparable, safer medication.[39] While pregnancy *does* increase cardiac work, there is nothing to indicate that pregnancy increases the severity of cardiac disease.[40]

Surgical intervention for pregnancy termination is not recommended in many cases purely for reasons of maternal health.

> Termination within the first trimester of pregnancy is less dangerous than formerly in these days of vacuum aspiration and wholesale abortion in early pregnancy but in fact there is seldom a straight indication for it. Barnes stated that since 1954 he had only recommended termination in one out of 535 cases of rheumatic heart disease (and she refused). For the patient who is not in cardiac failure there is no need to terminate and if she is in failure termination is next door to manslaughter. . .
>
> . . On no account may obstetrical intervention be undertaken until the patient's cardiac failure is under control, although the situation may seem so grim that one may be tempted to interfere. To do so would simply seal the patient's fate. Once failure has been controlled, however, the *need* to intervene in the pregnancy has passed. [Emphasis added.][41]

Three additional points should be made clear. (1) Pregnancy is *not* a contraindication for cardiac surgery, provided the operation is really needed.[42] (2) Pregnancy is often the only period when the woman with cardiac disease gets proper attention and treatment for her condition. (3) Abortion is not the appropriate treatment for the pregnant patient with cardiac disease.

Anemia. Three types of anemia in pregnancy are known (not including infection, trauma and/or congenital defects). Iron deficiency anemia can be treated by iron administration. Oral administration is the method of choice using ferrous sulfate, ferrous gluconate or ferrous fumarate. Parenteral administration is the next likely choice followed by blood transfusion if other methods fail.[43 44 45 46 47] Megaloblastic anemia is the result of folic acid deficiency and can be treated with folic acid, 1 mg. b.i.d.[48 49 50] Aplastic anemia is, like hemolytic anemia, "in no way peculiar to pregnancy."[51] Pregnancy with preexisting aplastic anemia does not adversely affect the course of the disease, long-term outlook being poor in any case.[52] Bleeding occurring as a result of the abortion procedure would only aggravate the anemic state. "The essential therapy for aplastic anemia is whole blood transfusion in order to prolong life until the bone marrow resumes its function. . . . Drugs that might be injurious to the marrow should be avoided, and substances that might stimulate the marrow (e.g., androgens, corticosteroids) should be tried."[53] Abortion is not medically indicated for anemia.

Idiopathic thrombocytopenic purpura. Idiopathic thrombocytopenic purpura (ITP) is the most common form of thrombocytopenia and occurs as the result of platelet destruction. Primary treatment is with corticosteroids. Splenectomy, the second level of treatment, is not recommended for pregnancy unless steroids have failed and bleeding is life-threatening.[54] The third stage of treatment involves immunosuppressive therapy.[55 56 57] Vincristine may be of some value and platelet concentrates are recommended to control bleeding.[58] Abortion is not medically indicated.

Von Willebrands Disease (A Deficiency of Blood Factor VIII). Von Willebrands disease is thought to be "the most common inherited bleeding disorder in women"[59] The disease can be treated by an infusion of cryoprecipitate of plasma if levels of factor VIII are low at term. [60 61 62] "Complications often can be avoided by performing coagulation studies throughout pregnancy . . ."[63] and by following other precautions routine for this condition. Abortion is not medically indicated.

Toxemia of Pregnancy (referred to in plaintiffs' affidavit as pre-eclampsia) "Treatment [of pre-eclampsia] is aimed at preserving the life and health of the mother; the fetus usually also will survive."[64] Mild pre-eclampsia may be treated by bed rest on an outpatient basis provided the woman visits her physician often. If her condition does not improve immediately, hospitalization is indicated. Parkland Memorial Hospital standardized the treatment for toxemia and its more severe form, eclampsia.[65] Definitive therapy consists of: 1) prevention or control of convulsions by parenteral use of magnesium sulfate. (note: "$MgSO_4$ [magnesium sulfate] therapy is easily managed with a minimum of demands upon the physician and a minimum of nursing time"[66] 2) control of blood pressure using hydralazine hydrochloride usually administered whenever diastolic blood pressure is greater than 110 mmHg. 3) early vaginal delivery. Early delivery is directly indicated after 37 weeks gestation. [67 68 69 70 71 72] Proper treatment using this regimen produces remarkable results, with many studies demonstrating a maternal mortality rate of *zero*. [73 74 75 76] Abortion is not medically indicated for the pregnant patient.

Varicose Veins. Varicose veins may occur during pregnancy, "Yet four months after delivery most of the tortuous saccularavarices are gone or at least no longer a cause of such symptoms as fatigue, warmth, itching, night cramps or swelling."[77] However, varicose veins are not an indication for pregnancy termination. At least six methods of treatment exist: 1) total excision, 2) saphenofemoral ligation, 3) sclerotherapy, 4) ligation and injection of a sclerosing agent into the exposed vein, 5) segmental stripping with multiple ligations, and 6) support with elastic bandages or hose.[78] Regarding surgical treatment, varicose veins are not considered a serious complication of pregnancy by Cranly et al, since "The combined experience of our associates now exceeds 4,200 women seen for varicose veins, and none of us has operated on the extremities of a patient during pregnancy. Others have reported surgery in pregnant patients, but logic compels us to refrain from performing an *elective* procedure until after the patient has delivered, especially since the associated symptoms can be managed by conservative measures."[79]

Systemic Lupus Erythematosus. Systemic lupus erythematosus (SLE) occurs post-partum and no method for detecting susceptible individuals presently exists. SLE crises can be precipitated by delivery, miscarriage, surgical procedures or therapeutic abortion. Treatment includes aspirin, steroids and prednisone. "It may be less risky for the woman to carry to term than to have an abortion."[80]

Cancer. Cancer-complicating pregnancy can be a serious risk to the woman. However, only specific cancers present an increased risk. "Breast cancer discovered during pregnancy is not an indication for termination. . . .

Previous breast cancer is not an indication for termination."[81] Chronic granulocytic leukemia is another example of a cancer that does not require pregnancy termination. "It is extremely important to realize that not every patient will require treatment during her pregnancy. . . . Therapy can often be delayed until the pregnancy is completed or at least until after the end of the first trimester."[82] "Pregnancy does not appear to have an adverse effect upon chronic leukemia."[83]

Thrombophlebitis. "Thrombophlebitis rarely occurs in pregnancy, but is slightly more common post-partum."[84] The primary goal of treatment is the prevention of thrombosis. This can be accomplished through the use of anti-coagulants such as herapin and warfarin. Warfarin is presently considered the only oral anti-coagulant safe for maternal use.[85] Thrombophlebitis can be treated by administration of heparin in any of four ways: intermittent intravenous, continuous intravenous, subcutaneous and, "minidose" heparin. (These are, in effect, prophylactic treatments against the possibility of thromboembolism.) Low dose heparin has been shown to be quite efficacious when administered subcutaneously, several studies showing no maternal deaths.[86] [87] Abortion is not medically indicated.

Diabetes. "During the past ten years, important advances have been made in caring for the pregnant woman with diabetes mellitus. Maternal mortality has been all but eliminated and maternal morbidity has been reduced significantly."[88] The key word in managing the pregnant diabetic is control. "Provided that the patient is well-controlled throughout pregnancy, the diabetic state is not

permanently worsened."[89] This basic understanding is supported throughout the medical literature.[90] [91] [92] [93] [94] Control can be effectively accomplished by strict regulation of diet, insulin, physical activity, and daily stress.[95] Class A diabetics can usually be managed by diet alone. Diabetic nephropathy, a matter of concern for the non-pregnant, as well as the pregnant diabetic, does not become aggravated by course of pregnancy. "Sims measured renal function serially in a group of diabetic patients with diabetic nephropathy and found no evidence that pregnancy worsened their renal function."[96] [97] Abortion is not medically indicated.

CONCLUSION

To the extent that the district court's decision holding the Hyde Amendment and the Illinois Funding Law unconstitutional is premised on a position that increased risk of mortality and morbidity in indigent women would result from these funding restrictions, the decision of the district court is unsound. The medical literature clearly establishes the existence of effective alternative medical treatment for which reimbursement is available under federal and state Medicaid programs.

Respectfully submitted,

DANIEL J. CHEELY
FRANCIS D. MORRISSEY
130 N. Randolph Drive
Chicago, Illinois 60601
Attorneys for 305
Obstetricians and Gynecologists

LIST OF AMICI

James E. Abell, M.D.
Prof, OB GYN.
John's Hopkins Univ. School of Medicine

Joseph L. Abbott, M.D.
Chief OB GYN., Chester County Hosp.
West Chester, PA.

George Anstey, M.D.
St. Louis, MO.

F. J. Arch Jr., M.D.
Teaching Staff Allegheny General Hosp.
Pittsburgh, PA.

James R. Bair, M.D.
Scottsdale, ARIZ.

William E. Barfield, Sr., M.D.
Augusta, GA.

Alex Barno, M.D.
Clinical Professor, OB GYN.
Univ. of Minnesota Med. School
Minneapolis, MINN.

Thomas J. Barrett M.D.
Med. Director Ursuline College
Cleveland, OHIO

Francis Bartek, M.D.
Director OB GYN
St. Joseph Hospital
Lorain, OH

John D. Bartels, M.D.
Assoc. Clinical Prof. OB GYN.
State Univ. of New York at Buffalo

Peter J. Bartzen, M.D.
Assoc. Prof. Univ. of Minn.
Chief, Dept. OB GYN, St. Mary's Hosp.
Duluth, MINN.

Francis T. Bergin, Jr., M.D.
Carlsbad, CALIF.

Thomas S. Bernat, M.D.
Loyola Stritch Med. School

Herbert M. Black, M.D.
Columbia, S.C.

Thomas Blake, M.D.
Miami, FLA.

George J. Blaugh, M.D.
Chicago, IL.

B. M. Benach, M.D.
Miami, FLA.

Paul H. Biever, M.D.
Assoc. Clinical Prof. OB GYN.
Med. College of Wisconsin

Oliver Blaber, M.D.
Sayville, N.Y.

Peter Blichert, M.D.
Fort Wayne, IN.

James Blythe, M.D.
Chairman Dept. OB GYN.
St. John's Mercy Med. Center
St. Louis, MO.

Bernard Bonnot, M.D.
Canton, OHIO

John G. Boutselis, M.D.
Columbus, OHIO

Bruce Boyle, M.D.
Greensburg, PA.

A. M. Bringardner, M.D.
Painesville, OHIO

John Brody, M.D.
Clearwater, FLA.

Alphonse H. L. Bruno, Jr., M.D.
Norfolk, VA.

Joseph A. Buck, M.D.
Clinical Instructor OB GYN.
University of Hawaii
Honolulu, Hawaii

Edward Buerger, M.D.
Waukesha, Wisconsin

William J. Buggy, M.D.
Asst. Clinical Prof. OB GYN.
Med. College of Wisconsin
Wauwatosa, WI.

Matthew J. Bulfin, M.D.
Ft. Lauderdale, FL

Joseph Burns, M.D.
West Deptford, N.J.

Laurence Burns, M.D.
Assoc. Clinical Prof.
Mich. State Univ.
College of Osteopathic Med.

J. Frederick, Cardwell, M.D.
Raceland, LA.

Gerald Carlin, M.D.
Pittsburgh, PA.

J. A. Caruso, M.D.
Clin. Assoc. Prof.,
Michigan State University
Medical School
Lansing, MICH.

D. A. Caselnova, M.D.
Dade City, Fla.

Robert Casey, M.D.
Great Falls, MONTANA

Joseph G. Chanatry, M.D.
Utica, New York

John J. Choby, M.D.
Doylestown, Pa.

Thomas Christiansen, M.D.
Joliet, Ill.

Frank R. Collier, M.D.
Setauket, N.Y.

William F. Colliton, Jr., M.D.
Silver Spring, MD.

Robert W. Colopy, M.D.
Painesville, Ohio

Patrick J. Concannon, M.D.
Assoc. Clin. Prof. Cornell Medical School

John J. Connelly, M.D.
Niagara Falls, N.Y.

Robert B. Connolly, M.D.
Toms River, N.J.

David A. Connors, M.D.
Jamaica, N.Y.

Robert R. Conte, M.D.
Latrobe, Pa.

Vincent S. Conti, M.D.
Lauderdale by the Sea, Fla.

C. W. Cotterell, M.D.
Clinical Instructor
University of Oregon

Peter J. Couri, M.D.
Peoria, Ill.

William Coyle, M.D.
Asst. Clin. Prof. OB Gyn.
Georgetown Univ. School of Medicine

Greer Craig, M.D.
Assoc. Clinical Prof. OB Gyn
Texas Tech. Univ. Medical School

Ulisse Cucco, M.D.
Assistant Prof. Stritch School Of Medicine
Loyola Univ. Chicago, Ill.

Joseph F. Cudia, M.D.
Toms River, N.J.

Eugene A. Curtin, M.D.
Director OB Gyn Mercy Hospital
Scranton, Pa.

James Cusack, M.D.
Santa Marria, Calif.

Anthony Cuva, M.D.
Bradonton, Fla.

Dorothy Czarnecki, M.D.
Philadelphia, Pa.

James Daleiden, M.D.
Waukesha, Wis.

George W. Danz, M.D.
Wyandotte, Michigan

John A. Darpel, Jr., M.D.
Erlanger, Ky.

James T. Dattilo, M.D.
Chief of OB Mercy Hospital
Pittsburgh, Pa.

James M. Delahunty, M.D.
Assistant Prof. OB Gyn
Rutgers Medical School, N. J.

Peter L. Delotto, M.D.
Morristown, N.J.

David M. Dersch, M.D.
Muncie, Indiana

Ludovic J. Devocht, M.D.
Alexandria, Va.

William J. Dignam
Prof.-OB Gyn
UCLA School of Medicine

Senatro W. DiLeo, M.D.
Asst. Prof. OB Gyn
St. Louis Univ. School of Medicine

Anthony J. DiSciullo
Instructor OB Gyn
Harvard Medical School
Cambridge, Mass.

John H. Doherty, M.D.
Scranton, Pa.

William S. C. Dolan, M.D.
Norway, Me.

Joseph P. Donnelley, M.D.
Asst. Prof. OB Gyn Columbia
Director OB Gyn Magaret Hagure
Maternity Hospital Jersey City, N.J.
Prof. OB Gyn Seton Hall Med. School

J. M. Doty, M.D.
Little Falls, Min.

Robert J. Dugan, M.D.
Assistant Clin. Prof. Case Western Reserve

Fernando V. Dulay, M.D.
San Francisco, Calif.

Walter R. Durkin, M.D.
Providence, R.I.

Stratton R. Easter, M.D.
Lynwood, Calif.

Marvin E. Eastlund, M.D.
Ft. Wayne, Ind.

Thomas R. Eckman, M.D.
Instructor OB Gyn
Northwestern Univ. Medical School

Homer Ellsworth
Associate Clin. OB Gyn
University of Utah

Renato S. Estrella
Kewaskum, Wis.

Cherie S. Evans, M.D.
Clin. Faculty OB Gyn
Univ. of Calif. San Francisco

Pablo A. Falo, M.D.
Clin. Instructor OB Gyn
Georgetown University

Robert Fitzgerald, M.D.
Clin. Instructor OB GYN
Cornell Medical College

Thomas A. Ferrara, M.D.
Indianapolis, Indiana

George N. Ferris, M.D.
Birmingham, Mich.

Eugene F. Finegan, M.D.
Hillcrest Hgts, Md.

James F. Flanagan, M.D.
Clin. Assoc. Prof. OB Gyn
New Jersey College of Medicine at Newark

Michael B. Flanagan, M.D.
San Francisco, Calif.

Arthur J. Florack, M.D.
Rochester, N.Y.

Joseph C. Flynn, M.D.
Warwick, R.I.

John A. Fochtman, M.D.
Kalamazoo, Mi.

Charles L. Foerster, M.D.
Roseville, CA

J. A. Fogarty, Jr., M.D.
Assoc. Clin. Prof.
Ohio College of Osteopathic Medicine

Hugh V. Foley, M.D.
Troy, N.Y.

Thomas F. Foley, M.D.
Manchester, N.H.

T.H. Foley, M.D.
Assoc. Clin. Prof. OB Gyn
Colorado University

Stanley A. Forster, M.D.
Landover Park, Md.

Rupert H. Friday, M.D.
Assoc. Clin. Prof.
Univ. of Pittsburgh

Edward G. Friedrich, M.D.
Elm Grove, Wisconsin

Enrico Frigeri, M.D.
Clin. Instructor OB Gyn
Mount Sinai Hosp. N.Y.C.

Paul Gabos, M.D.
Clin. Asst. Prof. OB Gyn
Magee Women's Hosp. Pittsburgh, Pa.

Casimiro Garcia, M.D.
Belleville, Ill.

Alvin G. Gendreall, M.D.
Clin. Instructor OB Gyn Tufts Univ. Med. School
Clin. Instructor OB Gyn Brown Med. School
Director OB Gyn St. Joseph's Hosp. Prov. R.I.

Frank A. Giglo, M.D.
Clin. Asst. Prof.
Univ. of Texas

John M. Gillette, M.D.
Assoc. U. of Ariz. Med. School
Tucson, Ariz.

John M. Glenn, M.D.
Instructor OB Gyn
Univ. of Cinn. College of Medicine

William A. Graber, M.D.
Oak Lawn, Ill.

Donald Grillo, M.D.
Chairman Dept OB Gyn Keesler AFB
Assoc. Clin. Prof. Tulane Med. School

Hugh Gavin Grimes, M.D.
Clin. Prof. Loyola Univ. Stritch School of Medicine
President, Medical Staff, St. Joseph Hospital, Ill.

Thomas G. Gorman, M.D.
Evergreen Park, Ill.

John T. Growney, M.D., P.A.
Atchison, Kansas

Emerita T. Gueson, M.D.
Philadelphia, PA

James R. Hagerty, M.D.
East Greenwich, R.I.

James P. Hartley, M.D.
Assn. Clinical Professor OB-Gyn,
Georgetown University Medical School
Washington, DC

Dalton C. Hartnett, M.D.
Fort Worth, Texas

Arthur Hassett, M.D.
Brockton, Mass.

Richard Hayden, M.D.
Clin. Prof. OB Gyn
Jefferson Med. School Phila. Pa.

John A. Heffernan, M.D.
North Miami, Florida

Roy J. Heffernan, M.D.
Emeritus Prof. OB Gyn
Tufts College Med. School

John F. Heffron, M.D.
Assoc. Clin. Prof., OB GYN
Creighton University School
of Medicine
Omaha, NEB

Dennis P. Heimback, M.D.
Clin. Instructor OB Gyn
State Univ. of N.Y. at Buffalo

George F. Heimbach, M.D., P.A.
West Palm Beach, Florida

James L. Hickey, M.D.
St. Louis, Mo.

Philip C. Higgins, M.D.
Sr. Instructor
St. Louis Univ. School of Medicine

Ralph L. High, M.D.
Muncie, In.

John F. Hillabrand, M.D.
Toledo, Ohio

William J. Hogan, M.D.
Rockville, Md.

Louis Iandoli, M.D.
Jamaica, N.Y.

Alfred A. Jacobs, M.D.
Clin. Instructor St. Elizabeth Hospital
Corington, Ky.

James W. Jackson, M.D.
Thibodaux, La.

Michael T. Jaekels, M.D.
Assistant Clin. Prof. OB Gyn
Medical College of Wisconsin

Benjamin A. Jagodzinski, M.D.
Assistant Prof. OB Gyn Rush Medical School
Chicago, Ill.

Richard Jayner, M.D.
Garden City, Mich.

Hermilo Jazmines, M.D.
Joliet, Ill.

Nina Vann Jeanes, M.D.
Johns Hopkins Hospital,
Georgetown University

John E. Jeffrey, M.D.
Beltsville, MD.

Carium Joseph, M.D.
Charleston, S.C.

John A. Joyce, M.D.
Pontiac, Mich.

Paul Juan, M.D.
Associate Director OB Gyn
St. Vincent Hospital
New York, N.Y.

L. R. Kavanagh, M.D.
Clin. Assistant Medical College
Toledo, Ohio

Peter J. Kearney
Associate OB Gyn
Northwestern Univ. School of Medicine

Edward F. Keefe, M.D.
New York, New York

John P. Keefe, M.D.
Cleveland, OH

Aloysius T. Kelly, M.D.
Boynton Beach, FL.

Thomas P. Kenter, M.D.
Clin. Assistant Prof. OB Gyn
Stanford Univ. School of Medicine

Peter R. Kesling, M.D.
Tacoma, WA

Donald W. Ketterhagen, M.D.
Naples, FL

Richard A. Knowles, M.D.
Coon Rapids, Minn.

Stanley Kordricki, M.D.
Milwaukee, Wis.

Richard A. Kovarik, M.D.
Rapid City, S.D.

Charles F. Kramer, M.D.
Loyola Stritch School of Medicine

Charles D. Krause, M.D.
Emeritus Asst. Clin. Professor OB-Gyn, Rush Medical School
Chicago, Ill.

Joseph G. Kremper, M.D.
Asst. Clin. Prof. OB Gyn
Stritch School of Medicine
Loyola University Medical Center

Frederick LaBurger, M.D.
Waterbury, Ct.

James A. Larson, M.D.
Fullerton, Calif.

George Lawrence, M.D.
Chairman Emeritus Dept. OB Gyn
Flushing Hospital Flushing, N.Y.

Thomas B. Lebherl, M.D.
Prof. OB Gyn UCLA

George Leicht, M.D.
No. Olmstead, Ohio

Louis B. Leone, M.D.
Assistant Prof OB Gyn
Northwestern University

John C. Linn, M.D.
Asst. Clin. Prof. OB Gyn
Medical College of Wisconsin

Louis Loes, M.D.
St. Cloud, Minn.

James B. Loftus, M.D.
Suffern, N.Y.

Ramon G. Lopez, M.D.
Joliet, Ill.

R. N. Lorenzini, M.D.
Downers Grove, Ill.

Albert B. Lorincz, M.D.
Clin. Assoc. Prof.
Stanford University

James R. Lovell, M.D.
Marquette, Mich.

Robert Lowden, M.D.
Seattle, Washington

Joseph A. Lucci, Jr., M.D.
Clin. Prof. OB Gyn Univ. of Texas Med. School
Academic Chief OB Gyn St. Joseph Hospital
Houston, Texas

J. Edward Lynch
Prof. (Hon.) Ob-Gyn,
Jefferson Medical College of
Thos. Jefferson Medical Center

Donald F. McGrath, M.D.
Toledo, Ohio

James D. Madden, M.D.
Assoc. Clin. Prof. OB Gyn
Univ. of Texas (Southwestern)
Medical School
Dallas, Texas

Henry F. Maguire, M.D.
San Diego, Calif.

John R. Marchese, M.D.
Boone, N.C.

John Medler, M.D.
St. Louis, Mo.

Jose Mesa, M.D.
Assistant Clin. Prof. OB Gyn
Jefferson School of Medicine
Wilmington, Del.

Orlando A. Milan, M.D.
Pompano Beach, Fla.

Frank Miller, M.D.
Mattoon, Ill.

George Mokria, M.D.
Chief OB Gyn Trumbell Memorial Hosp.
Wauren, Ohio

Edwin Moore, M.D.
Clin. Assoc. OB Gyn
Univ. of Conn. Medical School

James Moorman, M.D.
Prof. LSU Medical School
New Orleans, La.

John I. Moraca, M.D.
Sewickley, Pa.

George Moran, M.D.
Downers Grove, Ill.

William Moran, M.D.
Clin. Instructor OB Gyn
Cinn. Univ. School of Medicine

George Mortier, M.D.
Assoc. Prof.
North East Ohio University

Richard Muckerman, M.D.
Chief of Staff St. John's Mercy Med. Center
Asst. Prof. OB Gyn St. Louis University

William J. Madden, M.D.
Racine, Wis.

Fathallah Maghak, M.D.
Chief OB Gyn St. Josephs Hospital
Yonkers, N.Y.

John Malone, M.D.
Clin. Instructor OB Gyn
Wayne State Univ., Mich.

Donald L. Mansfield, M.D.
Atlanta, Georgia

Joseph Marshall, M.D.
Chairman Dept. OB Gyn At Joseph Mercy Hosp.
Pontiac, Mich.

Col. Marshall D. Matthews, M.D.
Chief OB-Gyn, Tripler Army Medical Center; Associate Clinical Professor, University of Hawaii; John A. Burns School of Medicine, Dept. OB-Gyn

Lene V. Martinez, M.D.
San Francisco, Calif.

John Marty, M.D.
Clin. Prof. OB Gyn
Southern Ill. Univ. School of Medicine

John Masterson, M.D.
Prof. OB Gyn Northwestern Univ. School of Med.

John McCarthy, Jr., M.D.
Clin. Associate Prof OB Gyn
Univ. of Pittsburgh School of Medicine

Paul McCauley, M.D.
Silver Spring, Md.

Charles P. McCoy, M.D.
Wichita KS 67208

Edwin McGill
Kerrville, Tx.

John F. McGill, M.D.
San Clemente, Calif.

Larry McGowan, M.D.
Prof. OB Gyn
George Washintgon Univ. Medical Center

James McNulty, M.D.
Clin. Prof. OB Gyn
U.S.C. School of Medicine

Peter J. McFarlane, M.D.
Alton, Ill.

Paul F. Muller, M.D.
Clinical Associate Prof. OB-Gyn
Asst. Dean St. Vincent Hospital,
Indiana University School of Medicine

E.K. Munn, M.D.
Columbus, GA

Edward J. Murphy, M.D.
Associate in OB-Gyn
Jefferson Medical College

M.J. Murphy, M.D.
Grand Rapids, Mi

G.C. "Tom" Nabors, M.D.
Associate Professor of OB-Gyn
Southwestern Medical School
Dallas, Texas

Joseph J. Nigu, M.D.
Glen Ellyn, Il

Charles A. Novotny, M.D.
Assistant Clinical Professor Family Practice,
University of California Davis, CA

Dr. Seamus P. Nunan
Silver Spring, MD

Edward J. Obeji, M.D., Inc.
Lakewood, CA

William T. O'Connell, M.D.
Assistant Clinical Professor Gyn-Tufts Medical
Brighton, Massachusetts

Joseph S. O'Connor, M.D.
Northwestern University Medical School
Assistant Professor of Clinical OB
Evanston, IL

John A. O'Meara, M.D.
San Jose, CA

John J. O'Neill, M.D.
Chief, Department OB-Gyn, Poudre Valley
Memorial Hospital
Fort Collins, Colorado

Ralph J. Onofrio, M.D.
Associate Professor Clinical OB-Gyn, Thomas Jefferson
Medical School
Philadelphia, PA

Philippe W. Ouellette, M.D.
University Of Massachusetts Medical School
Worcester, MA

George D. Patton, M.D.
Pittsburgh, PA

Congressman Ron Paul, M.D.
Washington, D.C.

AnthonyM. Pagano, M.D.
OB-Gyn
Oroville, CA

Louis R. Panigrosso, M.D.
OB-Gyn, Perth Amboy General Hospital
Perth Amboy, N.J.

Vincent J. McPeak, M.D.
Holy Redeemer Medical Building
Meadowbrook, PA

Frank J. Peifer, M.D.
Arlington Heights, IL

Howard L. Penning, M.D.
Indianlantic, Florida

Alfred A. Perfett, M.D.
Sharon, PA

John L. Picchietti, M.D.
Clinical Instructor, Loyola University Medical School
Chief of Staff-Memorial Hospital, DuPage County Illinois

Bernard J. Pisani, M.D.
Clinical Professor of OB-Gyn, New York
University School of Medicine
New York, N.Y.

Edward Y. Postma, M.D.
Grand Rapids, MI

Robert J. Powalski, M.D.
Clinical Assistant Professor OB-Gyn State University of N.Y., School of Medicine
Buffalo, N.Y.

Willard F. Preston, M.D.
Wilmington, Delaware

Louis M. Privitera, M.D.
Assistant Clinical Professor: State University of New York at Buffalo
Buffalo, New York

William R. Puttmann, M.D.
College of Medicine, University of Cincinnati
Cincinnati, Ohio

Garry A. Quinn, M.D.
Sheboygan, Wis.

Joseph A. Raimondi, M.D.
Toms River, N.J.

Antonio Ramos-Barroso, M.D.
Hato Rey, PR

Kevin D. Reilly, M.D.
Chief of Obstetrics: St. Vincents Hospital, Clinical Assistant Professor New York Medical College
New York, N.Y.

R. M. Reineck, M.D.
Toledo, Ohio

Joseph J. Ricotta, M.D.
American Fertility Society; International Fertility Society
Buffalo, New York

Brian F. Rigney, M.D.
Instructor-Yale
Chairman, OB-Gyn-Hospital St. Raphael
New Haven, Ct.

Norman Edward Ringer, M.D.
Modesto, Calif.

Gerald T. Riordan, M.D.
Clinical Associate Professor, OB-Gyn. Dept., Southern Illinois Medical School
Springfield, Illinois

Dale W. Ritter, M.D.
Chico, Ca

Paul John Ritter, M.D.
Assistant Clinical Professor of OB-Gyn. at St. Louis University Medical School
St. Louis, Missouri

Richard R. Robie, M.D.
Willoughby, Ohio

J. F. Rojas, M.D.
Assistant Clinical Instructor-University of Illinois
Champaign-Urbana, Illinois

Richard R. Romanowski, M.D.
Clinical Professor at State University of New York
Buffalo, New York

Joseph L. Der Rosiew, M.D.
Head of Dept. of OB-Gyn. Seton Hospital
Austin, Texas

Ralph G. Ryan, M.D.
Assistant Clinical Professor OB-Gyn.
Stritch School of Medicine, Loyola University
Maywood, Il

Richard M. Ryan, M.D.
Salem, Massachusetts

A. B. Saehi, M.D.
Hawaiian Gardens, Calif.

William A. Scaring, M.D.
Instructor, Dept. OB-Gyn.
Stritch School of Medicine, Loyola University
Maywood, Ill.

A. William Schafer, M.D.
Hinsdale, Ill.

John T. Scully, M.D.
Clinical Associate Professor of OB-Gyn., Rutgers University
New Brunswick, New Jersey

Joanne A. Schoen, M.D.
Clinical Instructor OB-Gyn.
Case Western Reserve University
Mayfield Heights, Ohio

Robert C. Schoenfeld, M.D.
Assistant Clinical Professor, OB-Gyn., Tufts University School of Medicine
Brighton, Ma

Homer Schroeder, Associate Clinical Professor OB-Gyn., Medical College of Ohio at Toledo
Toledo, Ohio

Joseph Schultz, M.D.
Parma, Ohio

Ralph C. Schwarz, M.D.
Cincinnati, Ohio

E. A. Scioscia, M.D.
Pittsburgh, Pa.

Frederick G. Sehring, M.D.
DePere, Wis.

Michael H. Serio, Jr., M.D.
Clinical Assistant Professor: Stritch School of Medicine;
Instructor: Abraham Lincoln School of Medicine
Illinois

George E. Siemers, M.D.
Instructor: St. Louis University
St. Louis, Mo.

William H. Simson, M.D.
Springfield, Ill.

John E. Sinsky, M.D.
Assistant Clinical Professor-OB-Gyn., Medical College of Wisconsin
Milwaukee, Wisconsin

William E. Skinner, M.D.
Clinical Instructor OB-Gyn.,
Tufts University Medical School, Boston, MA

F.L. Soisson, Jr., M.D.
Johnstown PA 15901

M. LeRoy Sprang, M.D.
Associate, Northwestern University Medical School
Evanston, IL

John W. Stehly, M.D.
University of Southern California Staff-OB-Gyn.;
OB-Gyn. Practice St. Jude Fullerton
Fullerton, CA

Edward F. Sternen, M.D.
Euclid, Ohio

William C. Stewart, M.D.
Wauwatosa, WI

Joseph J. Straub, M.D.
Dubuque, Iowa

Andrew A. Sullivan, M.D.
Associate Professor of OB-Gyn.;
Jefferson Medical College
Philadelphia, PA

Edward M. Sullivan, M.D.
Associate Professor of OB-Gyn
Jefferson Medical College
Philadephia, PA

John J. Sullivan, M.D.
Assistant Clinical Professor
University of California, Davis

Eugene J. Sweeney, M.D.
Lowell, MA

Thomas R. Sweeney, M.D.
Instructor OB-Gyn, University of Rochester
Rochester, NY

Daniel R. Taffe, Jr., M.D.
ABOG; Visiting Professor Allied Health
Northern Essex Community College
Haverhill, Massachusetts

Michael V. Tepedino, M.D.
Westburg, New York

Blanchard H. Texada, Sr.
Assoc. Professor OB-Gyn. Tulane
Alexandria, LA

Hubert H. Theissen, M.D.
Clinical Instructor Dept. OB-Gyn.
University of South Dakota Medical School;
Chief Dept. OB-Gyn. Rapid City Regional Hospital
Rapid City, SD

Thomas M. Tierney, M.D.
Instructor: Stritch School of Medicine,
Loyola University
Maywood, IL

James P. Thompson, M.D.
Chairman, Dept. OB-Gyn., St. Josephs Hospital,
Paterson, New Jersey
Associate Professor, College Medicine
Dentistry of New Jersey
Upper Montclair, New Jersey

Salvatore R. Traina
Co-Chief OB Gyn,
New England Memorial Hospital
Medford, MA

George P. Trodella, M.D.
Ft. Lauderdale, FL.

Antonin J. Troup, M.D.
Quincy, IL

John D. Turco, M.D.
Hagerstown MD
J. Phillip Tyndall, M.D.
Associate Instructor OB Gyn,
Indiana University School of Medicine
Ft. Wayne, IN

Kenneth M. Uznanski, M.D.
Associate, Northwestern University Medical School
Evanston, IL

James B. Tormey, Jr., M.D.
Clinical Associate Professor OB-Gyn, State University New York
Stonybrook, New York

J. D. Veach, M.D.
Clinical Instructor OB Gyn
Ohio State University
Columbus, Ohio

Robert J. Walsh, M.D.
New York, N.Y.

Charles J. Ward, M.D.
Decatur, GA 30030

James S. Wahs, M.D.
Elmhurst, IL 60126

William J. Wiegel, M.D.
Aurora,IL

James V. Werba, M.D.
Orland, FL

C. G. Wichser, M.D.
Clinical Instructor, Louisiana State University
New Orleans, LA

Emanuel C. Wilhelm
Assoc. Professor of OB-Gyn, Rush Presbyterian Hospital
Chicago, Ill.

C.E. Wood, M.D.
Casper WY

Joseph J. Woods, M.D.
Southfield MI

Leo A. Wrona, M.D.
Joliet IL

Clyde W. Yellick, M.D.
Elm Grove WI

Frank J. Zarka, M.D.
Clinical Assisitant Professor OB-Gyn,
Stanford University
California

Paul E. Zuelke, M.D.
Portland, OR

Thaddeus S. Zwirkoski, M.D.
Teaching staff: Providence, and
Mt. Carmel Mercy Hospital
Southfield MI

APPENDIX

1. Isreal and Woutersz, *Teenage Obstetrics,* 85 Am. J. Obstet. Gynecol. 869 (1963).
2. Anderson, *Comprehensive Management of the Pregnant Teen-ager,* 7 Contemporary OB/GYN 75 (1976).
3. Briggs, Herren, *et al., Pregnancy in the Young Adolescent,* 84 Am. J. Obstet. Gynecol. 436 (1962)
4. Dwyer, *Managing the Teenage Pregnancy,* 12 Ob-Gyn Observer 2 (1975).
5. Webb, Briggs, Brown, *A Comprehensive Adolescent Maternity Program in a Commnity Hospital,* 84 Am. J. Obstet. Gynecol. 442 (1962).
6. Houde and Conway, *Teen-age Mothers: a Clinical Profile,* 7 Contemporary OB/GYN 71 (1976).
7. Sarrel and Klerman, *The Young Unwed Mother,* 105 Am. J. Obstet. Gynecol. 575 (1969).
8. Dott and Fort, *Medical and Social Factors Affecting Early Teenage Pregnancy,* 125 Am. J. Obstet. Gynecol. 532 (1976).
9. Clark, Wong, *et al., The Pregnant Adolescent,* 142 Ann. N. Y. Acad. Sci. 813 (1970).
10. Zaeckler, Adelman, *et al., The Young Adolescent as an Obstetrical Risk,* 103 Am. J. Obstet. Gynecol. 305 (1969).
11. Fiakpui and Moran, *Pregnancy in the Sickle Hemoglobinopathies,* 11 Journal of Reproductive Medicine 28 (1973).
12. M. Barnhart, R. Henry, J. Lusher, Sickle Cell 89 (2d Ed. 1976).
13. *Supra* n. 11 at 34.

14. Morrison and Wiser, *The Use of Prophylactic Partial Exchange Tranfusion in Pregnancies Associated with Sickle Cell Hemoglobinopathies,* 48 Obstetrics and Gynecology 516 (1976).

15. Horger, *Managing the Patient with Sickle Cell Disease,* 2 Contemporary OB/GYN 55 (1973).

16. Horger, *Hemoglobinopathies in Pregnancy,* 17 Clinical Obstetrics and Gynecology 139-143 (1974).

17. Blattner, *et al. Pregnancy Outcome in Women with Sickle Cell Trait,* 238 JAMA 1342 (1977).

18. Wallach, *et al. Pregnancy and Menstrual Functions in Narcotics Addicts Treated with Methadone,* 105 Am. J. Obstet. Gynecol. 1226 (1969).

19. Blinick, *et al., Methadone Maintenance, Pregnancy and Progeny,* 225 JAMA 477 (1973).

20. Stimmel and Adamson, *Narcotic Dependency in Pregnancy: Methadone Maintenance Compared to the Use of Street Drugs,* 235 JAMA 1121 (1970).

21. Perlmutter, *Drug Addiction in Pregnant Women,* 89 Am. J. Obstet. Gynecol. 569 (1967).

22. Statzer and Wardell, *Heroin Addiction During Pregnancy,* 113 Am. J. Obstet. Gynecol. 273 (1972).

23. Newman, *Pregnancies of Methadone Patients,* 74 New York State Journal of Medicine 52 (1974).

24. Stone, *et al., Narcotics Addiction in Pregnancy,* 190 Am. J. Obstet. Gynecol. 718 (1971).

25. Stern, *The Pregnant Addict,* 14 Am. J. Obstet. Gynecol. 253 (1966).

26. Blinick, *et al., Pregnancy in Narcotics Addicts Treated by Medical Withdrawal,* 105 Am. J. Obstet. Gynecol. 997 (1969).

27. Newman, *et al., Results of 313 Consecutive Live Births in the New York City Methadone Maintenance Treatment Program,* 121 Am. J. Obstet. Gynecol. 233 (1975).

28. R. Berkow, The Merck Manual 955 (13th ed. 1977).

29. Coustan and Lewis, *Clinical Approaches to Diabetes in Pregnancy,* 7 Contemporary OB/GYN 427 (1976).

30. *Supra* n.28.

31. D. Ian, Practical Obstetric Problems (5th ed. 1979).

32. *Supra* n.31.

33. Kitay, *Bleeding Disorders in Pregnancy,* 7 Contemporary OB/GYN 88 (1976).

34. Ueland, *Cardiovascular Diseases Complicating Pregnancy,* 21 Clinical Obstetrics and Gynecology 431 (1978).

35. Ueland, *What's the Risk when the Cardiac Patient is Pregnant,* 13 Contemporary OB/GYN 119 (1979).

36. *Supra* n.35.

37. *Supra* n.28 at 961.

38. *Supra* n.34 at 432.

39. *Supra* n.34 at 432.

40. *Supra* n.35 at 117.

41. *Supra* n.31 at 169-170.

42. *Supra* n.31 at 170, 176-177.

43. *Supra* n.31 at 169-170.

44. *Supra* n.28.

45. Messer, *Pregnancy Anemias,* 21 Clinical Obstetrics and Gynecology 163-179 (1978).

46. Carr, *Managing Iron Deficiency in Pregnancy,* 4 Contemporary OB/GYN 15 (1974).

47. Kitay, *Assessing Anemia in the Pregnant Patient,* 2 Contemporary OB/GYN 17 (1973).

48. *Supra* n.28 at 268.

49. *Supra* n.46.
50. Kitay, *Folic Acid Deficiency,* 10 CONTEMPORARY OB/GYN 30 (1977).
51. *Supra* n.31 at 217.
52. *Supra* n.44.
53. *Supra* n.28 at 270.
54. O'reilly, *Problems of Hemorrhage and Thrombosis in Pregnancy,* 2 CLINICAL HEMATOLOGY 553 (1973).
55. *Supra* n.31.
56. *Supra* n.28.
57. Flessa, *Hemorrhagic Disorders and Pregnancy,* 17 CLINICAL OBSTETRICS AND GYNECOLOGY 238 (1974).
58. *Supra* n.28 at 311.
59. Noller, *et al., Managing von Willebrand's Disease During Pregnancy* 4 CONTEMPORARY OB/GYN 107 (1974).
60. *Supra* n.28 at 315, 316.
61. *Supra* n. 58.
62. *Supra* n.33 at 93.
63. *Supra* n.58.
64. *Supra* n.28 at 953.
65. Pritchard and Pritchard, *Standardized Treatment of 154 Consecutive Cases of Eclampsia,* 123 AM. J. OBSTET. GYNECOL. 543 (1975).
66. Gant. *et al., Clinical Management of Pregnancy-Induced Hypertension,* 21 CLINICAL OBSTETRICS AND GYNECOLOGY 397 (1978).
67. Dilts and Jenkins, *Treating Preeclampsia and Eclampsia,* 4 CONTEMPORARY OB/GYN 57 (1974).
68. *Supra* n.64.

69. *Supra* n.65.
70. Zuspan, *Problems Encountered in the Treatment of Pregnancy Induced Hypertension,* 131 AM. J. OBSTET. GYNECOL. 591 (1978).
71. Freund, *et al., Hemodynamic and Metabolic Studies of a Case of Toxemia of Pregnancy,* 127 AM. J. OBSTET GYNECOL. 206 (1977).
72. *Supra* n.31.
73. *Supra* n.65.
74. *Supra* n.69.
75. *Supra* n.70.
76. *Supra* n.64.
77. Tunick, *An Internist Looks at Varicose Veins,* 11 CONTEMPORARY SURGERY 112 (1977).
78. *Supra* n.77.
79. Cranley, *Managing Varicose Veins in Pregnancy,* 7 CONTEMPORARY OB/GYN 143 (1976).
80. Rothfield and Chao, *The Effects of SLE on Pregnancy,* 10 CONTEMPORARY OB/GYN 64 (1977).
81. R. Messer, *Medical Indications For Pregnancy Interruption,* PREGNANCY TERMINATION 309 (1st 1979).
82. Levine and Colea, *When Pregnancy Complicates Chronic Granulocytic Leukemia,* 13 CONTEMPORARY OB/GYN 49 (1979).
83. Sheehy, *An Evaluation of the Effect of Pregnancy on Chronic Granulocytic Leukemia,* 75 AM J. OBSTET. GYNECOL. 789 (1958).
84. *Supra* n.28 at 962.
85. Flesa, *et al., Thromboembolic Disorders in Pregnancy: Pathophysiology Diagonosis and Treatment with Emphasis on Heparin,* 17 CLINICAL OBSTETRICS AND GYNECOLOGY 215-216 (1974).

86. Gallus, *et al., Prevention of Venous Thrombosis with Small Subcutaneous Doses of Heparin,* 235 JAMA 1980 (1976).

87. Baskin *et al., Low-Dose Heparin for Prevention of Thromboembolic Disease in Pregnancy,* 129 Am. J. Obstet. Gynecol. 590 (1977).

88. Gabbe, *New Ideas on Managing the Pregnant Diabetic Patient,* 13 Contemporary OB/GYN 109 (1979).

89. *Supra* n.31 at 191.

90. *Supra* n.87.

91. Ismach, *Diabetes in Pregnancy: New Group Discusses Management Problems,* 11 Contemporary OB/GYN 31 (1978).

92. Duhring, *Diabetes in Pregnancy: How to Diagnose and Treat It,* 9 Contemporary OB/GYN 117 (1977).

93. Coustan and Lewis, *Clinical Approaches to Diabetes in Pregnancy,* 7 Contemporary OB/GYN 27 (1976).

94. Linzey, *Controlling Diabetes with Continuous Insulin Infusion,* 12 Contemporary OB/GYN 43 (1978).

95. *Supra.* n.87.

96. Lindheimer and Davison, *Renal Disease in Pregnant Women,* 21 Clinical Obstetrics and Gynecology 420 (1978).

97. Sims, *Serial Studies of Renal Function in Pregnancy Complicated by Diabetes Mellitus,* 10 Diabetes 190 (1961).